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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,971	12/03/2001	Syed M. Ali	16159.023001; P6425	7806

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EXAMINER	
TRUONG, LECHI	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/004,971	ALI ET AL.	
	Examiner	Art Unit	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-24 and 26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-24 and 26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 3, 4-24, 26 are presented for the examination. Claims 2 and 25 are cancelled.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1 – 5 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.

3. Claims 1, 4 are directed to method steps, which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, restricting invoking, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process (see MPEP 21061.

Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change "method" to "computer implemented method" in the preamble to overcome the outstanding 35 U.S.C. 101 rejection).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims **1, 3-5, 22, 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumsion et al (6,496,865 B1) in view of Marcos et al (US. Patent 6,347,342 B1).

5. As to claim 1, Sumsion teaches the invention substantially as claimed including: a system having distributed collaborating systems (a distributed network, col 1, ln 10-14), restricting direct interaction between distributed collaborating (col 2, ln 57-67/col 4, ln 60-67), a application-independent interface (a redirector, col 1, ln 40-46/col 4, ln 5-10/ln 60-67/the resource access system 108/an interpreter system 202, col 7, ln 45-65/ col 8, ln 55-67/col 11, ln 9-18), an application-independent interface between distributed collaborating systems(col 11, ln 9-18/col 1, ln 40-55/col 2, ln 10-20), a service(the client redirector 306, col 11, ln 9-18), invoking a service from the application-independent interface in order to enable interaction between distributed collaborating components(col 11, ln 9-19), sending a usage specification to the application independent interface (col 4, ln 60-66).

6. Sumsion does not explicit teach usage specification as an argument, the systems as components. However, Marcos teaches an argument (the method and argument from the message, col 4, ln 53-55/ the message using the argument supplied by the client object col 7, ln 10-15), components (component object model, col 6, ln 35-39/ ln 45-49).

7. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Sumsion and Marcos because Marcos's usage specification

as an argument, components would improve the efficiency of Marcos's system by allowing a component can be used as a bridge to create a mapping between a client object and a server object.

8. **As to claim 3**, Sumsion teaches the application independent interface has a capacibility to interpret the usage specification at runtime (col 1, ln 40-46/col 3, ln 18-25/col 4, ln 5-10/ln 60-67 / col 7, ln 45-65/ col 8, ln 55-67/col 11, ln 9-18).

9. **As to claim 4**, Sumsion teaches the invention substantially as claimed including: a system having distributed collaborating systems (a distributed network, cool 1, in 10-14), restricting direct interaction between distributed collaborating (col 2, in 57-67/col 4, ln 60-67), a application-independent interface (a redirector, col 1, ln 40-46/col 4, ln 5-10/ln 60-67/the resource access system 108/an interpreter system 202, col 7, ln 45-65/ col 8, ln 55-67/col 11, ln 9-18), an application-independent interface between distributed collaborating systems(col 11, ln 9-18/col 1, ln 40-55/col 2, ln 10-20), a service(the client redirector 306, col 11, ln 9-18), invoking a service from the application-independent interface in order to enable interaction between distributed collaborating components(col 11, ln 9-19), sending a usage specification to the application independent interface (col 4, ln 60-66), and Marcos teaches a logic execution specification as an argument(the method and argument from the message, col 4, ln 53-55/ the message using the argument supplied by the client object col 7, ln 10-15), components (component object model, col 6, ln 35-39/ ln 45-49).

10. **As to claim 5,** Allard teaches a logic execution specification (the method to add a book to an order is sent to the server, col 4, ln 44 –46).

11. **As to claim 22,** it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Sumison teaches a server object component having at least one object (resources on the server node 251, col 8, ln 57-58).

12. **As to claim 26,** Marcos teaches attribute of an object on the server (col 17, ln 1-2/ col 18, ln 44-46).

13. Claims **6-9, 12-21, 23, 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumsion et al (6,496,865 B1) in view of Marcos et al (US. 6,347,342 B1) in view of Schofield (US. 6,751,798 B1)

14. **As to claim 6,** Sumsion teaches a service layer (a redirector, col 1, ln 40-45/col 9, ln 1-10/ the resource access system 108/an interpreter system 202, col 7, ln 45-65/ col 8, ln 55-67/col 11, ln 9-18), interposing a service layer between the client and the server (col 9, ln 15-32), the service layer having a capability to interpret a specification from the client at run time in order to enable interaction between the client and the server (col 11, ln 9-19), routing correspondence between the client and server through the service layer(col 11, ln 13-18/ ln 38-43/ln 63-67).

15. Sumsion does not explicit teach specification as an argument. However, Marcos teaches an argument (the method and argument from the message, col 4, ln 53-55/ the message using the argument supplied by the client object col 7, ln 10-15).

16. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Sumsion and Marcos because Marcos's usage specification

as an argument would improve the efficiency of Marcos's system by allowing a component can be used as a bridge to create a mapping between a client object and a server object.

17m. Sumsion and Marco do not teach the specification is one selected from the group consisting of a usage specification and a logic execution specification. However, Schofield teaches the specification is one selected from the group consisting of a usage specification and a logic execution specification (a client application sends a request to the server, the request contains an indication of the operation to be performed on a specific reference for that object, the parameters to that operation, the object reference for that object, execution information, col 2, ln 5-10/ a client sent request to the ORB for method to be performed on an object, the ORB validates the arguments contained in the request, col 2, ln 30-35).

11. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Sumsion, Marco and Schofield because Schofield's the specification is one selected from the group consisting of a usage specification and a logic execution specification would improve the efficiency of Sumsion and Marco's systems by ensuring the existence of object before performing the implementation on that object.

12. As to claim 7, Sumsion teaches the specification comprises an attribute of an object on the server (col 11, ln 62-64).

13. As to claim 8, Sumsion teaches fetching data from the object based on the specification (col 7, ln 8/ col 10, ln 19-24/ln 60-67 and col 12, ln 60-65).

14. As to claim 9, Sumsion teaches storing data fetched from the server in a proxy for the object (col 10, ln 48-50).

15. **As to claims 12, 13**, Schofield teaches the logic execution specification comprising logic for invoking a method of an object on the server (col 2, ln 31-37).

16. **As to claim 14**, Sumision teaches separating specification of usage of an object on the server from implementation of the client (col 10, ln 17-24).

17. **As to claim 15**, Schofield teaches separating specification of logic for invoking a method of an object on a server from implementation of client (col 2, ln 31-37).

18. **As to claim 16**, it is an apparatus claim of claim 6; therefore, it is rejected for the same reason as claim 6 above.

19. **As to claim 17**, Sumision teaches a usage of an object in the server component (col 13, ln 42-46).

20. **As to claims 18, 19,** Sumision teaches fetching data from the object based on the usage/ updating data in the object based on the usage (col 13, ln 42-48).

27. **As to claims 20, 21, 23**, they are apparatus claims of claims 12, 13, 5; therefore, they are rejected for the same reasons as claims 12, 13, 5 above.

28. **As to claim 24**, it is an apparatus claim of claim 1; therefor, it is rejected for the same reason as claim 1 above. In additional, Sumsion teaches a application-independent interface (a redirector, col 1, ln 40-46/col 4, ln 5-10/ln 60-67/the resource access system 108/an interpreter system 202, col 7, ln 45-65/ col 8, ln 55-67/col 11, ln 9-18), interpreting a specification (col 1, ln 40-46/col 3, ln 18-25/col 4, ln 5-10/ln 60-67 / col 7, ln 45-65/ col 8, ln 55-67/col 11, ln 9-18), client sends the specification (col 1, ln 40-45), a server component that interacts with the service means in order to provide service to the client component(col 11, ln 62-67).

31. Claims **10, 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumsion et al (6,496,865 B1) in view of Marcos et al (US. Patent 6,347,342 b1) in view of Schofield (US. 6,751,798 B1) and further in view of Admitted Prior Art (APA).

32. As to claims 10, 11, Sumsion, Marcos and Schofield do not teach updating data in the object/ modifying the attribute of the object. However, APA teaches updating data in the object/ modifying the attribute of the object (page 2, ln 25-28).

33. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Sumsion, Marcos, Schofield and APA because APA's updating data in the object/ modifying the attribute of the object would increase the flexibility of Sumsion, Marcos and Schofield's systems by allowing modifications to distributed application to take effect without bringing the servers down.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312 or (571) 272 3767 (new). The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

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